SONY

3-798-622-**21** (1)

CD Radio Cassette-Corder

CFD-17

Operating Instructions

COMPACT disc DIGITAL AUDIO

MEGA BASS

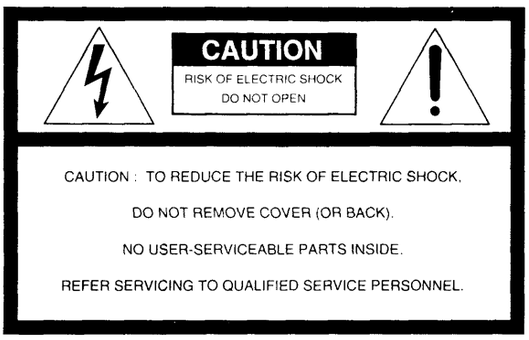
Owner's Record

The model number is located at the bottom of the CD radio cassette-corder, and serial number is located in the battery compartment. Record the serial number in the space provided below. Refer to these numbers whenever you call your Sony dealer regarding this product.

Model No. CFD-17 Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the player to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

The use of optical instruments with this product will increase eye hazard.

For customers in Canada

To prevent electric shock, match wide blade of plug to wide slot, fully insert.

Information

For customers in the United States

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

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Precautions

On safety

- As the laser beam used in the CD player section is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
- Should any solid object or liquid fall into the player, unplug the player, and have it checked by qualified personnel before operating it any further.

On power sources

- For AC operation, use the supplied AC power cord; do not use any other type.
- For battery operation, use six size D (R20) batteries.
- Unplug the player from the wall outlet when it is not to be used for an extended period of time.
- When the batteries are not to be used for a long time, remove them to avoid damage that can be caused by battery leakage or corrosion.
- The nameplate indicating operating voltage, power consumption, etc. is located on the bottom.

On placement

- Do not leave the player in a location near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.

On operation

- If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the CD player section.
  Should this occur, the player will not operate properly. In this case, remove the CD and wait about an hour for the moisture to evaporate.
- If the player has not been used for a long time, set it in the playback mode to warm it up for a few minutes before inserting a CD or cassette.

Note on using a cassette with more than 90 minutes of play time

The use of a cassette with more than 90 minutes of play time is not recommended except for long, continuous recording or playback.

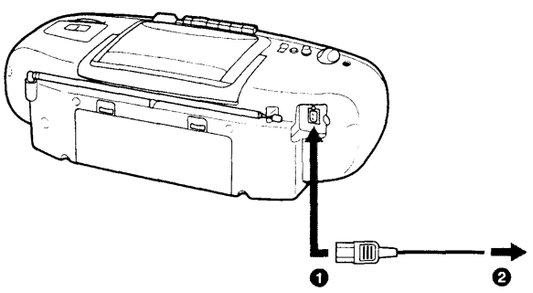
If you have any questions or problems concerning your player, please consult your nearest Sony dealer.

Power Sources

The CD cassette-corder has two separate power sources. Use the AC power source (house current) whenever you record because recording consumes the most power. Use six size D (R20) batteries when the CD cassette-corder becomes a portable.

Operating the player on AC power

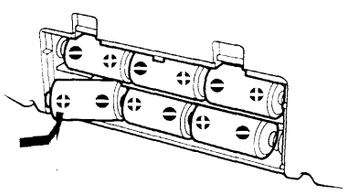
Insert one end of the supplied power cord to the AC IN socket located at the rear of the player ❶ and the other end to the wall outlet ❷.



To wall outlet

Operating the player on batteries

To play your CD cassette-corder on batteries, the AC power cord must be disconnected from the player. Unplug the player and insert six size D (R20) batteries (not supplied) in the compartment.



When to replace the batteries

Replace the batteries when the OPR/BATT indicators dims or when the player stops operating.
When the batteries are weak, replace all the batteries with new ones.

Maintenance

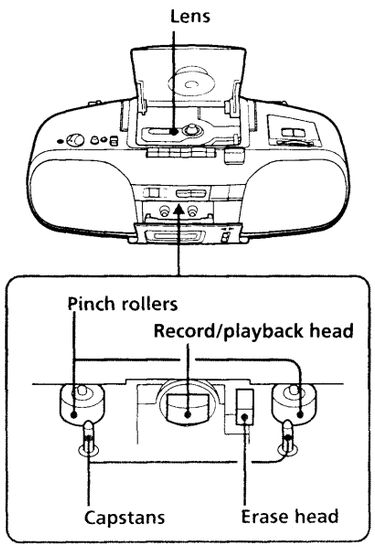
Cleaning the lens

If the lens becomes dirty, it may cause a skipping of sound during CD operation. Clean with a commercially available blower.

Cleaning the tape heads and tape path

Contaminated heads cause poor recording or sound drop-out in playback. We recommend cleaning after every 10 hours of operation. To make the best possible recording, however, you should clean all surfaces over which tape travels before each recording.

Wipe the heads, the pinch rollers and the capstans with a cleaning swab slightly moistened with cleaning fluid or alcohol.



After cleaning the heads, rollers and the tape path, insert a tape when the areas cleaned are completely dry.

Demagnetizing the tape heads

After 20 to 30 hours of use, enough residual magnetism will have built up on the heads to begin to cause loss of high frequency sound and hiss. At this time, you should demagnetize the heads and all metal parts in the tape path with a commercially available tape head demagnetizer.

Cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent, such as alcohol or benzene.

Notes on Compact Discs

- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out.

- Do not use solvents such as benzene, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in temperature inside the car.
- After playing, store the CD in its case.

If there is a scratch, dirt or fingerprints on the CD, it may cause tracking error.

Troubleshooting Guide

General

The power does not come on.

- Connect the AC power cord securely.
- Insert the batteries with the correct polarity.
- Replace the batteries with new ones if they are weak.

There's no audio.

- make sure the FUNCTION selector is set to the function you want to operate.
- Adjust the volume.
- Unplug the headphones when listening through speakers.

Radio

The audio is weak or poor quality.

- Replace all the batteries with new ones if they are weak.
- Move the player away from the TV.

The picture of the TV is unstable.

- If you are listening to an FM program near the TV with an indoor antenna, move the player away from the TV.

CD Player

The CD does not play.

- Make sure the disc compartment is closed.
- Place the CD with the label facing up.
- Clean the CD.
- Take out the CD and leave the disc compartment open for about an hour to dry moisture condensation.
- Make sure the FUNCTION selector is set to CD.

The sound drops out.

- Reduce the volume.
- Clean the CD, or replace it if the CD is badly damaged.
- Place the player in a location free from vibration.

Tape Player

The tape does not move when you press an operation button.

- Close the cassette compartment.

The ● REC button does not function.

- Make sure the safety tab of the cassette is in place.
- Make sure the FUNCTION selector is set to CD, AM or FM.

The tape does not erase completely.

- Clean the erasing head.
- Replace all the batteries with new ones if they are weak.

The tape does not record.

- Make sure the tape is inserted properly.
- Make sure the safety tab of the cassette is in place.

The audio is weak.

- Clean the heads, pinch rollers and capstans.

The audio quality is poor.

- Demagnetize the heads using a demagnetizer.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 3.2-ohm loads, both channels driven from 150-10,000 Hz; rated 2.0 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

Other specifications

CD player section

System	Compact disc digital audio system
Laser diode properties	Material: GaAlAs Wave length: 780 nm Emission duration: Continuous Laser output: Less than 44.6 µW (This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block.)
Spindle speed	200 r/min (rpm) to 500 r/min (rpm) (CLV)
Error correction	Sony Simple Error Correction
Number of channels	2
Frequency response	20–20,000 Hz +1.0/–2.5 dB
Wow and flutter	Below measurable limit

Radio section

Frequency range	FM: 87.6–108 MHz AM: Taiwan model 530–1,605 kHz Other models 530–1,710 kHz
Antennas	FM: Telescopic antenna AM: Built-in ferrite bar antenna

Cassette-corder section

Recording system	4-track 2-channel stereo
Frequency response	TYPE I (normal) cassette: 70–10,000 Hz

General

Speaker	Full range: 10 cm dia., 3.2 ohms cone type
Outputs	Headphones jack (stereo minijack): For 16–68 ohms impedance headphones
Power output (excluding US model)	2.3 W + 2.3 W (at 3.2 ohms, 10% harmonic distortion in DC operation)
Power requirements	120 V AC, 60 Hz DC 9 V, 6 size D (R20) batteries
Power consumption	25 W (Taiwan model) 20 W (Other models)
Battery life	For CD radio cassette-corder:

	FM recording	Tape playback	CD playback
Sony SUM-1 (NS)	approx. 13.5 h	approx. 7.5 h	approx. 2.5 h
Sony Alkaline AM1	approx. 19 h	approx. 12 h	approx. 4.5 h

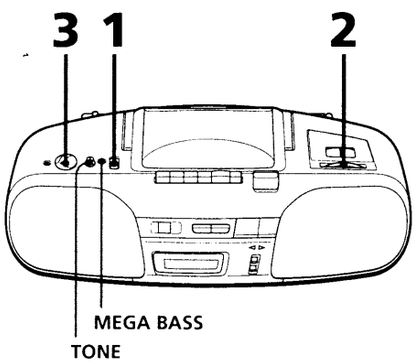
Dimensions	Approx. 500 x 160 x 250 mm (w/h/d) (19¾ x 6⅜ x 9⅞ in.) incl. projecting parts
Mass	4.1 kg (9 lb) (incl. batteries)
Supplied accessories	AC power cord (1)

Design and specifications subject to change without notice.

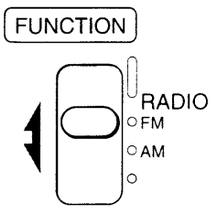
Optional accessories

Sony MDR stereo headphone series

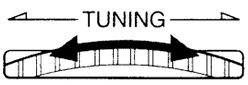
Listening to the Radio



1 **Set FUNCTION to AM or FM.**



2 **Turn TUNING to tune in a radio station.**



If the received FM stereo is too weak, the reception becomes monaural.

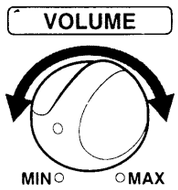
Adjusting the Sound Emphasis

To adjust the tone
Turn the TONE control.
Turn the control clockwise to enhance the high tone and counterclockwise to enhance the low tone.

To reinforce the bass sound
Press MEGA BASS (⏍ ON).
To resume sound, press MEGA BASS again.

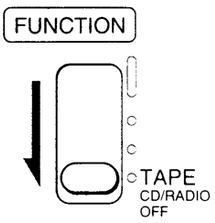
Note on MEGA BASS
The MEGA BASS system contains the Dynamic Bass Boost (DBB) circuit. The DBB varies the amount of boost in the low frequency range depending on the volume control, producing a deep and powerful bass sound. It is most effective at low volume level.

3 Turn VOLUME.



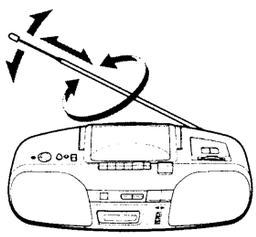
Adjust the sound emphasis, if necessary (see below).

To turn off the radio

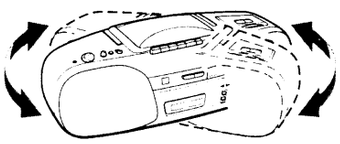


To improve broadcast reception

FM

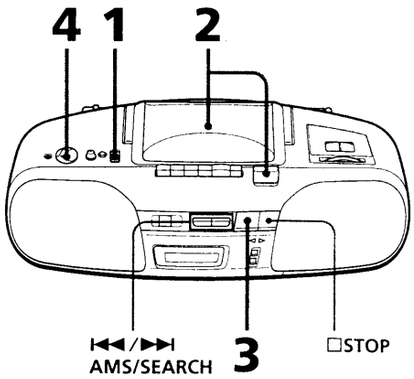


AM



Playing a CD

You can play 12

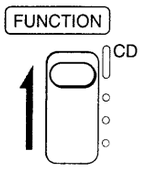


AMS: Automatic Music Sensor

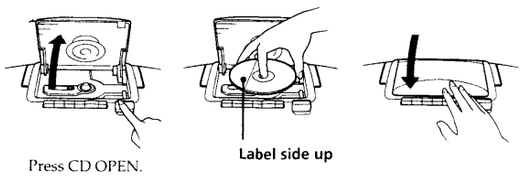
To	Press
Stop play	□ STOP
Pause	▷II PLAY/PAUSE
Resume play after pause	▷II PLAY/PAUSE
Remove the CD	First □ STOP, then CD OPEN

cm (5 inch) and 8 cm (3 inch) CDs without an adaptor.

1 Set FUNCTION to CD.



2 Place the CD.



Press CD OPEN.

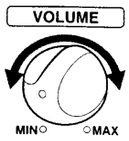
The number of tracks on the disc appears in the display window.

3 Press ▷II PLAY/PAUSE.

The CD player will play all the tracks once. The track number appears in the display window.

4 Turn VOLUME.

(Be careful not to turn up the volume excessively while listening to a portion with very low audio input. If you do, the speakers may be damaged when a peak level plays.)



Adjust the sound emphasis, if necessary.

To find the beginning of a track

To find	Press
the beginning of the current track	I◄◄ once
the beginning of the previous tracks	I◄◄ repeatedly
the beginning of the next track	►►I once
the beginning of the succeeding tracks	►►I repeatedly

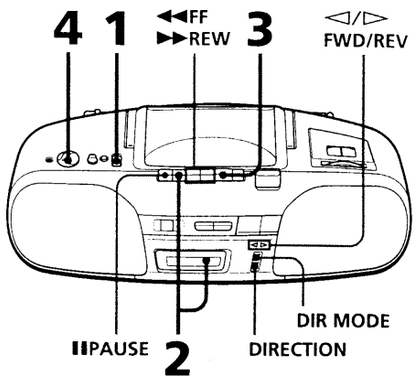
To find a point in a track

Press down I◄◄ or ►►I in play mode to search by listening for the point you want to hear.

To turn off the power

Set the FUNCTION selector to TAPE (CD/RADIO OFF).

Playing a Tape Use Type I

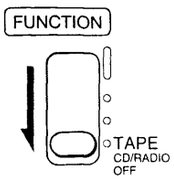


To	Press
Stop play	■⏏ STOP/EJECT
Pause	II PAUSE
Resume play after pause	II PAUSE
Fast forward*	◀◀ FF
Rewind*	▶▶ REW
Remove the cassette	■⏏ STOP/EJECT

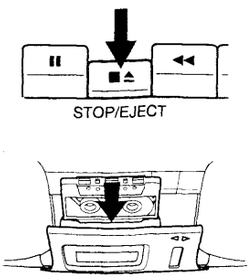
* For the side facing forward.

(normal) tape.

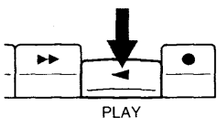
1 Set FUNCTION to TAPE (CD/RADIO OFF).



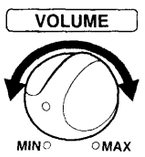
2 Insert a recorded tape.



3 Press ◄PLAY to start playing.



4 Turn VOLUME.



Adjust the sound emphasis, if necessary.

To select playback mode

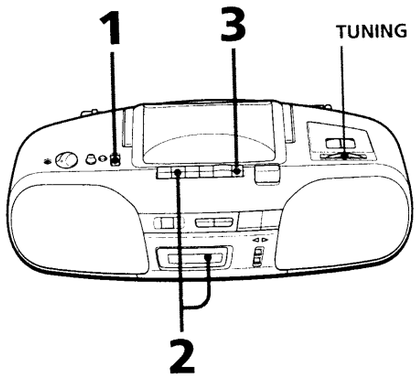
To play	Switch DIR MODE to
Both sides of the tape repeatedly	⇆
Both sides of the tape from side A to B only*	→

* If play begins from side B, the tape stops at the end of that side.

To switch play to the opposite side

Push down and release the DIRECTION lever.
The ◁FWD or ▷REV indicator lights to show the tape transport direction.

Recording Use Type I (normal)

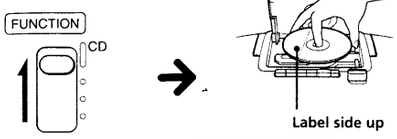


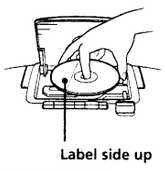
Saving a tape permanently

To prevent a tape from being accidentally recorded over, break off the cassette tab from side A or B as illustrated. If you later want to reuse the tape for recording, cover the broken tab with adhesive tape.

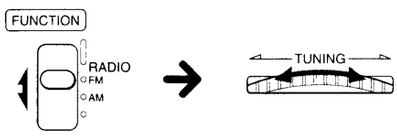
al) tape.

1 From CD

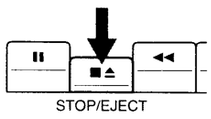


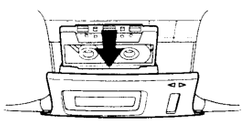


From radio

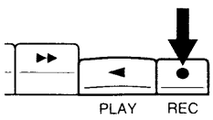


2 Insert a blank tape.



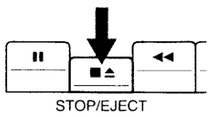


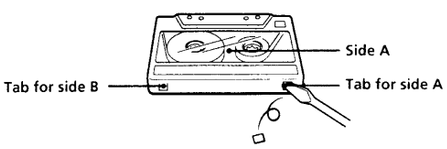
3 Press ● REC.



◄ PLAY will depress automatically and recording starts. CD recording starts after about 8 seconds.

To stop recording





To erase a recording

1 Set FUNCTION to TAPE (CD/RADIO OFF).
2 Press ● REC.

The recording level is adjusted automatically

Adjusting the volume, tone or MEGA BASS will not affect the recording level. However, these controls will change the sound levels you hear through speakers or headphones.